AUDIT REPORT

MAR 2023

ANALYTIX AUDIT

Security Assessment

Pepa Inu Token

March 6, 2023

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Assessment Summary

This report has been prepared for Pepa Inu Token on the Binance Smart Chain network. Analytix Audit provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders
- Thorough line-by-line manual review of the entire codebase by industry experts.

Technical Findings Summary

Classification of Risk

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
Major	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Minor	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

Findings

Severity	Found	Pending	Resolved
Critical	0	0	0
Major	0	0	0
Medium	0	0	0
Minor	1	1	0
Informational	0	0	0
Total	1	1	0

Project Overview

Token Summary

Parameter	Result
Address	0xC3137c696796D69F783CD0Be4aB4bB96814234Aa
Name	Pepa Inu
Token Tracker	Pepa Inu (PEPA)
Decimals	9
Supply	420,000,000,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.4+commit.c7e474f2
Contract Name	LiquidityGeneratorToken
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0xC3137c696796D69F783CD0Be4aB4bB96814234Aa#code
Payment Tx	e1a166143024279c71aef06b3bd1a245d8f5ce74b008cf776bc9c588f7084bdb

Project Overview

Risk Analysis Summary

Parameter	Result
Buy Tax	10%
Sale Tax	10%
Is honeypot?	Clean
Can edit tax?	Yes
Is anti whale?	No
Is blacklisted?	No
Is whitelisted?	No
Holders	3
Confidence Level	Medium

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

Main Contract Assessed Contract Name

Name	Contract	Live
Pepa Inu	0xC3137c696796D69F783CD0Be4aB4bB96814234Aa	Yes

TestNet Contract was Not Assessed

Solidity Code Provided

SolID	File Sha-1	FileName
LiquidityGeneratorToken		LiquidityGeneratorToken.sol

Mint Check

The project owners of Pepa Inu do not have a mint function in the contract, owner cannot mint tokens after initial deploy.

The Project has a Total Supply of 420,000,000,000,000,000 and cannot mint any more than the Max Supply.

Mint Notes:

Auditor Notes:

Project Owner Notes:

Owner can't mint new coins

Fees Check

The project owners of Pepa Inu do not have the ability to set fees higher than 25% .

The team May have fees defined; however, they can't set those fees higher than 25% or may not be able to configure the same.

Tax Fee Notes:

Auditor Notes: The contract currently has 10% buy and 10% sell taxes, and cannot be set higher than 25.

Project Owner Notes:

Fees can be changed up to a maximum of 25%

Blacklist Check

The project owners of Pepa Inu do not have a blacklist function their contract.

The Project allow owners to transfer their tokens without any restrictions.

Token owner cannot blacklist the contract: Malicious or compromised owners can trap contracts relying on tokens with a blacklist.

Blacklist Notes:

Auditor Notes:

Project Owner Notes: undefined

MaxTx Check

The Project Owners of Pepa Inu cannot set max tx amount

The Team allows any investors to swap, transfer or sell their total amount if needed.

MaxTX Notes:

Auditor Notes:

Project Owner Notes:

Project Has No MaxTX

Pause Trade Check

The Project Owners of Pepa Inu don't have the ability to stop or pause trading.

The Team has done a great job to avoid stop trading, and investors has the ability to trade at any given time without any problems

Pause Trade Notes:

Auditor Notes: Owner can set bot limits trough Pinksale AntiBot and can cause trading stop for some users.

Project Owner Notes:

Owner can't pause trading

Contract Ownership

The contract ownership of Pepa Inu is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x4dcc41E99b56570BC96D4a449E75f5b664245Ba7 which can be viewed:
HERE

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner's wallet is compromised, they could exploit these privileges.

We recommend the team renounce ownership at the right time, if possible, or gradually migrate to a timelock with governing functionalities regarding transparency and safety considerations.

We recommend the team use a Multisignature Wallet if the contract is not going to be renounced; this will give the team more control over the contract.

Liquidity Ownership

The token does not have liquidity at the moment of the audit, block

If liquidity is unlocked, then the token developers can do what is infamously known as 'rugpull'. Once investors start buying token from the exchange, the liquidity pool will accumulate more and more coins of established value (e.g., ETH or BNB or Tether). This is because investors are basically sending these tokens of value to the exchange, to get the new token. Developers can withdraw this liquidity from the exchange, cash in all the value and run off with it. Liquidity is locked by renouncing the ownership of liquidity pool (LP) tokens for a fixed time period, by sending them to a time-lock smart contract. Without ownership of LP tokens, developers cannot get liquidity pool funds back. This provides confidence to the investors that the token developers will not run away with the liquidity money. It is now a standard practice that all token developers follow, and this is what really differentiates a scam coin from a real one.

Read More

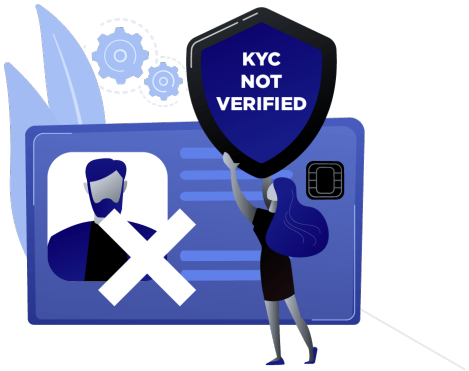
KYC Information

The Project Owners of Pepa Inu is not KYC.

KYC Information Notes:

Auditor Notes:

Project Owner Notes:



Smart Contract Vulnerability Checks

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-108	Fail	State variable visibility is not set..	LiquidityGeneratorToken.sol	L: 959 C: 9
SWC-109	Pass	Uninitialized Storage Pointer.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	LiquidityGeneratorToken.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-112	Pass	Delegate Call to Untrusted Callee.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randonmness.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	LiquidityGeneratorToken.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U+202E).	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	LiquidityGeneratorToken.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	LiquidityGeneratorToken.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

Smart Contract Vulnerability Details

SWC-108 - State Variable Default Visibility

CWE-710: Improper Adherence to Coding Standards

Description:

Labeling the visibility explicitly makes it easier to catch incorrect assumptions about who can access the variable.

Remediation:

Variables can be specified as being public, internal or private. Explicitly define visibility for all state variables.

References:

Ethereum Smart Contract Best Practices - Explicitly mark visibility in functions and state variables

Inheritance

The contract for Pepa Inu has the following inheritance structure.

The Project has a Total Supply of 420,000,000,000,000,000

Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/pepa_inu	Pass
Other	https://www.instagram.com/pepa_inu/	Pass
Website	https://pepa-inu.com/	Pass
Telegram	https://t.me/+IpF0IZqLFyNiZmM8	Pass

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:

Assessment Results

Score Results

Review	Score
Overall Score	87/100
Auditor Score	86/100
Review by Section	**Score**
Manual Scan Score	39/50
SWC Scan Score	48 /50
Advance Check Score	undefined /0

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

Audit Passed

Assessment Results

Important Notes:

- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.
- Safemath is no longer needed and is recommended to recode it.

Auditor Score =86
Audit Passed

Appendix

Finding Categories

Centralization / Privilege

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

Logical Issue

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functionsbeing invoke-able by anyone under certain circumstances.

Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code,such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

Coding Best Practices

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.

Disclaimer

Analytix Audit has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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